Application No.: 09/504,782 Attorney Docket No.: 740819-337 Art Unit 2828

Page 15

REMARKS

The final Office Action of May 18, 2004 was received and carefully reviewed. The Applicants have amended claims 1 and 4 to further limit the relationship of x and y to x > y which finds support in the specification at least at page 19, lines 2-16, and page 20, lines 13-22.

Additionally, claims 17 and 24, as well as claims 18 and 25, have been amended to recite the combination of an optical disk apparatus or an optical integrated unit comprising the semiconductor laser device of claim 1 or claim 4, respectively. Such claims present a combination of claim features in the combination-subcombination format recited in MPEP Chapter 806.05(c)(II) – AB_{sp}/B_{sp} in which the subcombination " B_{sp} " is essential to the combination, and therefore, must not be subject to a requirement for restriction between claims 1-6 and claim 17, 18, 24 and 25.

The Applicants wish to thank the Examiner for the indication that claims 4-6 are allowable over the prior art of record. Consequently, claims 1-30 currently remain pending, with claims 7-16, 19-23, 26-30 being withdrawn from consideration as being directed to non-elected inventions.

Initially, the Applicant respectfully requests withdrawal of the "finality" of the Office Action of May 18, 2004, since the newly cited Jung et al. (Korean Patent document No. KR 2002000898), which consists of two pages of an English Abstract and one page of a drawing figure taken from EAST Version 1.4.1 on July 14, 2004, is discussed by the Examiner as teaching the features lacking from the Sverdlov '337 reference. That is, it is alleged by the Examiner, at page 3, line 2-6, of the May 18^{th} Office Action, that Jung et al teach placement of an $In_xGa_{1-x}N$ layer as a buffer between the substrate 11 and the first cladding layer 13 of $In_xAL_yGal_{1-x-y}N$, and also teaches the claimed " $x \ge y$ " relationship. However, the Amendment of October 31, 2003 did <u>not</u> amend either of those features of claim 1 (or claim 4), but instead added the feature "0 < x < 1, 0 < y < 1" which was not discussed at all in the Examiner's final Office Action of May 18^{th} . Additionally, the Applicants' Amendment does not state or assert that Sverdlov '337 does not NVA302786.1

Application No.: 09/504,782 Attorney Docket No.: 740819-337

Art Unit 2828

Page 16

teach this "0 < x < 1, 0 < y < 1" feature. Accordingly, since the new ground of rejection relying upon the Jung et al reference was not necessitated by any amendment by the Applicants, the "finality" of the Office Action of May 18, 2004 is wholly inappropriate and premature, pursuant to the explicit guidelines of MPEP Chapter 706.07(a), and must now be withdrawn.

Reconsideration and withdrawal of the currently pending rejection is requested for the reasons advanced in detail below.

With regard to the Examiner's rejection of claims 1-3, under 35 U.S.C. 103(a), as being obvious in view of the teachings of Sverdlov '337 in combination with the teachings of Jung et al. (Korean Patent document No. KR 2002000898), this rejection is respectfully traversed.

As discussed at length in the Amendment of October 31, 2003, the Sverdlov '337 patent does not teach or suggest the presence of an In_xGa_{1-x}N layer between the n⁺ GaN cladding layer 16 and the substrate 12, but the patentees instead disclose the presence of a buffer GaN layer between the n⁺ GaN cladding layer 16 and the substrate 12. Further, the Sverdlov reference does not teach or suggest the "x > v" relationship of the content of "In" in the buffer layer or active layer as presently claimed (or as claimed in the earlier Amendment of October 31, 2003). Additionally, a review of the Jung et al reference cited by the Examiner does not reveal any explicit teaching of a relationship, i.e., "x > y", between the "In" content of the In_xGa_{1-x}N buffer layer 12 and the active layer 15 (which is also of the formula In, Ga1-xN) as presently claimed. It is further noted that layers 13 and 14 of Jung et al. are composed of In_xAl_yGa_{1-x-y}N and are not active layers. Further, the claimed relationship of "In" in the buffer layer to the "In" in the active layer, i.e., "x > y", does not appear to be implicitly suggested by any of the teachings of Jung Therefore, the teachings of Jung et al. do not remedy the teachings of et al. Sverdlov such that each and every feature of the present claim 1 is taught or suggested by the references.

Turning to the reasons suggested by the Examiner for making the proposed combination of teachings of Jung et al. and Sverdlov, the Applicants note that Jung

Application No.: 09/504,782 Attorney Docket No.: 740819-337

Art Unit 2828

Page 17

et al. teach that the In_xGa_{1.x}N buffer layer 12 is utilized so that the mole density (i.e., content) of indium is easily increased or decreased which enable the layers 13 and 14 of the formula In_xAl_yGa_{1-x-y}N to be easily grown. However, since Sverdlov (Figure 1) do not require either the cladding layers 16, 24 or core layers 18, 22 to have any content of "In" or "Al" content, there is no motivation provided by Jung et al. to employ a In_xGa_{1-x}N buffer layer between the cladding layer of 16 and substrate 12 of Sverdlov since a cladding (or core) layer of In_xAl_yGa_{1-x-y}N is not be grown by Sverdlov.

Without a teaching of the individual features of claim 1 or a suggestion to combine the features of Jung et al. with those of Sverdlov to achieve the claim 1 features, the rejection of claims 1-3, under 35 U.S.C. 103(a), has been set forth in error. Consequently, it is respectfully requested that the rejection, under 35 U.S.C. 103(a), be withdrawn.

Having responded to the rejection set forth in the outstanding final Office Action, it is submitted that claims 1-6, 17, 18, 24 and 25 are in condition for allowance. An early and favorable Notice of Allowance is respectfully solicited. In the event that the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, the Examiner is courteously requested to contact Applicants' undersigned representative.

Respectfully submitted,

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